

Project Name

Deep PI

Problem statement

Road accidents account for a large number of deaths and injuries each year in Jordan and remain the leading cause of accidental death for children and adults and They can cause life-changing injuries including loss of limbs, spinal injuries and head injuries.

the most common cause of car accidents in Jordan is Fatigue. There are no doubt many reasons for drivers falling asleep at the wheel, but in most situations fatigue has to do with poor planning, overconfidence, and desperation. Common reasons for driver fatigue may include: Poor diet, Medications, Sleep disorders, Poor physical health and Time of day.

Project solution

First of all, I used two trained model from Open-CV and I used first model to detect faces and second one to detect facial point annotations and after that calculate EAR and there is two main files one of them uploaded on rasspberry pi and the second one on arduino mega.

*Deep PI will turn on if driver fall in sleep and if he is still sleeping that mean there is something wrong and the device will send his location as SMS message to specific number he select using Key bad

* if driver want to change number then he must press # from keypad.

* if driver want to use GPS service then he must tern on hotpots with specific name and password.

* if SMS message sent then the driver must press * in order to reboot the device

